

In the CLAIMS:

*Please amend claims 1- 7, 10, 12, 13, 17, 23, and 24, and add claim 26, as follows. All claims are presented with their appropriate status indicators.*

1. (Currently Amended) Method for the attachment of a functional element (14) having a head end (20) and optionally a shaft part (22), ~~in particular a fastener element,~~ to a sheet metal part (12), optionally in liquid-tight and/or gas-tight form, wherein the functional element is pressed against the sheet metal part (12) supported by a die button having a shaping space (62) and sheet metal material is pressed by means of at least one movably mounted shaped part (50), and preferably by means of at least two such shaped parts (50) of the die button, and by a radially inwardly directed movement of the or each shaped part, into an undercut of the functional element (14), with the or each shaped part forming a respective wall region of the shaping space (62), wherein the or each shaped part (50) is initially radially ~~an envelope surface region~~ supported by a surface (88) of an abutment element and is prevented from a radially inwardly directed movement so long until the sheet metal material is drawn by the head end (20) of the functional element (14) into the shaping space (62) for the formation of a pronounced recess (87) at least largely surrounding the head end and is only then released by an axial movement of the ~~envelope surface region~~ surface (88) past the or each shaped part for the radial movement for the pressing of the sheet metal material into the undercut.

2. (Currently Amended) Method in accordance with claim 1, wherein the or each shaped part (50) is rounded at the surfaces (66) facing the sheet metal material at ~~the a~~ transition into the wall section (58) forming the shaping space (62) and in that ~~the said a~~ wall section presses the sheet metal material into features of shape (24) at ~~the a~~ radially outer side of the head end of the functional element.

3. (Currently Amended) Method in accordance with claim 1, wherein the or each shaped part (50) has at its surfaces confronting the sheet metal material, at the transition into the wall section forming the shaping space, a rounded radially inwardly directed projection (64) which presses the sheet metal material into an undercut formed at the head end (20) of the element (14),

or at ~~the~~ a transition from the head end (20) of the functional element (14) into the shaft part (22).

4. (Currently Amended) Method in accordance with claim 1, wherein the abutment element is urged back by the head end (20) of the functional element (14) through ~~the~~ an intermediary of the sheet metal material (12) during the formation of the recess (87) until the support of the or each shaped part at the abutment element is removed.

5. (Currently Amended) Method in accordance with claim 1, wherein after ~~the~~ freeing of the radially inwardly directed movement the shaped parts (50) slide under ~~the~~ pressure of ~~the~~ a plunger on respective guide tracks (44) inclined to the longitudinal axis (30) of the die button and are thus simultaneously moved axially and radially.

6. (Currently Amended) Method in accordance with claim 4, wherein after the attachment of the functional element (14) to the sheet metal part (12), the shaped parts (50) are moved in the axial direction by the biased abutment element (68), with ~~the~~ a component assembly formed by the functional element and the sheet metal part, which is also axially moved by the abutment element (68) being released and the axial movement of the component assembly optionally causing a radially outwardly directed movement of the shaped parts permitted by the inclined guide tracks (44).

7. (Currently Amended) Method in accordance with claim 1, wherein sheet metal material is brought by means of the shaped parts (50) into engagement with features (24) providing security against rotation, ~~in particular groove-like and/or rib-like features~~ formed on the functional element (14).

8. (Original) Method in accordance with claim 1, wherein the sheet metal part (12) is not perforated and not pierced, at least in the region of the functional element (14) during its attachment to the sheet metal part.

9.(Original) Method in accordance with claim 1, wherein a pre-holed sheet metal part is used

and/or in that the sheet metal part is pierced during the attachment of the functional element by means of a self-piercing functional element or a preceding hole punch.

10. (Currently Amended) Die button (10) for the attachment of a functional element having a head end (20) and optionally a shaft part (22), ~~in particular a fastener element (14)~~, to a sheet metal part (12), optionally in liquid-tight and/or gas-tight form, wherein the die button (10) has a die button body (40) with at least one shaped part (50) movably mounted therein, preferably at least two such shaped parts and also an abutment element (68) biased in the direction towards the sheet metal part for the or each shaped part at the centre of the die button body wherein the or each shaped part (50) forms a wall region of a shaping space (62) which is provided in the die button in the region of its end face confronting the sheet metal part and is guided by a respective obliquely positioned guide track (44) for a radially inwardly directed movement, which leads to the sheet metal material being pressed into a feature or shape (24), i.e. into an undercut of the functional element, and wherein each shaped part (50) is radially supported on ~~an envelope surface region~~ a surface (88) of the abutment element (68) during the formation of a recess (87) in the sheet metal part which takes place in the shaping space (62) of the die button by pressure exerted onto the head end (20) of the functional element (14) and is hereby prevented from the radially inwardly directed movement so long until the ~~envelope surface region~~ surface (88) of the abutment element (68) against which each shaped part (50) is supported is moved by the said pressure from the head end (20) of the functional element (14) against the bias past the shaped part and has released the radial movement of the shaped part.

11. (Original) Die button in accordance with claim 10, wherein after the movement of the abutment element (68) past the shaped part (50), the obliquely disposed guide tracks (44) lead, as a result of the pressure on the sheet metal part, to the radially inwardly directed movement of the shaped parts with simultaneous axial movement of the same.

12. (Currently Amended) Die button in accordance with claim 10, wherein the axial length of the region surface (88) of the abutment element (68) which prevents the shaped parts (50) from the radially inwardly directed movement is so dimensioned that ~~the a~~ the recess (87) is formed by the

head end of a functional element in the shaping space (62) of the sheet metal part at least largely surrounds the head end (20) before the support of the shaped parts at this region surface (88) is removed by sliding this region surface (88) past the shaped parts and the radial movement of the shaped parts is freed.

13. (Currently Amended) Die button in accordance with claim 10, wherein the shaped parts (50) are rounded at their surfaces (66) confronting the sheet metal material (12) at ~~the~~ a transition into the wall sections (58) forming the shaping space (62).

14. (Original) Die button in accordance with claim 10, wherein the shaped parts (50) have, at their surfaces (66) confronting the sheet metal material (12) at the transition into the wall sections (58) forming the shaping space (62), radially inwardly directed projections (64) which press the sheet metal material into an undercut (24) formed at the head end (20), or at the transition of the head end (20) of the functional element (14) into the shaft part (22).

15. (Original) Die button in accordance with claim 10, wherein for each shaped part (50) there is provided a guide track (44) resembling a T-groove inclined towards the longitudinal axis (30) of the die button in which it slides after freeing of the radially inwardly directed movement under the pressure of a plunger (16) and is thus simultaneously axially and radially moved.

16. (Original) Die button in accordance with claim 10, wherein the shaping space (62) is also formed by fixedly arranged wall regions (60) of the die button body (40) which are each arranged between two movable shaped parts (50) of the die button.

17. (Currently Amended) Die button in accordance with claim 16, wherein in ~~the~~ a starting state prior to generation of the recess (87) in the sheet metal part, the fixedly arranged wall regions (60) of the die button body are aligned with or offset fractionally in front of or behind the wall regions (58) of the shaped parts (50) which co-define the shaping space (62), whereas, in ~~the~~ a closed state of the die button, after the completion of ~~the~~ a connection between the functional element and the sheet metal part, they are significantly set back relative to the radially inwardly

advanced wall regions (58) of the shaped parts (50) which co-define the shaping space (62).

18. (Original) Die button in accordance with claim 10, wherein a spring (72) disposed in a hollow cavity of the die button is provided for the biasing of the abutment element (68) in the axial direction towards the sheet metal part (12).

19. (Original) Die button in accordance with claim 18, wherein the abutment element (68) has, at its end confronting the spring (72), a radial shoulder (70) which comes into contact with a shoulder (74) of the die button and hereby limits the maximum movement of the abutment element (68) towards the sheet metal part (12).

20. (Original) Die button in accordance with claim 19, wherein the spring (72) is supported at its end remote from the abutment element (68) on an abutment (82) fixed in the die button.

21. (Original) Die button in accordance with claim 20, wherein the spring (72) is pre-stressed between the shoulder (70) of the abutment element (68) and a shoulder of the abutment (82).

22. (Original) Die button in accordance with claim 20, wherein the abutment (82) is held in a longitudinal bore of the die button by means of a spring ring (84).

23. (Currently Amended) Die button in accordance with claim 10, wherein the abutment element (68) has a front pin part (76) ~~the a~~ free end face (78) of which can be loaded by the head end (20) of a functional element (14), optionally through ~~the an~~ intermediary of the sheet metal part, for the axial movement of the abutment element (68).

24. (Currently Amended) Die button in accordance with claim 10, wherein ~~the~~ end faces of the shaped parts (50) confronting the sheet metal part (12) project, up to the conclusion of the radially inwardly directed movement of the shaped parts (50), beyond the end face (46) of the die button (40).

25. (Original) Die button in accordance with claim 24, wherein at the conclusion of the radial inwardly directed movement of the shaped parts (50) these are flush with the end face (46) of the die button body.

26. (New) Die button in accordance with claim 7, wherein said features providing security against rotation are at least one of ribs and grooves.